EXHIBIT 4

Test Report

Test Report

ACS-F98040

APPLICATION FOR CERTIFICATION
On Behalf of
JING MOLD ENTERPRISE CO., LTD.
Keyboard

Model : JME-7551A

Prepared for : JING MOLD ENTERPRISE CO., LTD.
No. 6-7, I-Huo Rd., Ta-Ya Chiang,
Taichung Hsien, Taiwan, R.O.C.

Prepared By : Audix Technology (Shenzhen) Co., Ltd.
No. 6 Ke Feng Rd., 52 Block,
Shenzhen Science & Industrial Park,
Nantou, Shenzhen, Guangdong, China

Tel: (0755)663-9496

Report Number	:	ACS-F98040
Date of Test	:	Nov. 16/19, 1998
Date of Report	:	Nov. 20, 1998

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TEST REPORT CERTIFICATION

Applicant	:	JING MOLD ENTERPRISE CO., LTD.
Manufacturer	:	JING MOLD PLASTIC ELECTRONICS (SHENZHEN) CO., LTD.
EUT Description	:	Keyboard
		(A) MODEL NO. : JME-7551A
		(B) SERIAL NO. : N/A
		(C) POWER SUPPLY : +5V DC

Measurement Procedure Used:

FCC Rules and Regulations Part 15 Subpart B Class B October 1997 & FCC / ANSI C63.4-1992

The device described above is tested by AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart Class B limits both radiated and conducted emissions.
The measurement results are contained in this test report and AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC requirements.
This report applies to above tested sample only. This report shall not be reproduced in part without written approval of AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

Date of Test : Nov. 16/19, 1998

Prepared by : Mabel Liu 20/11
(ASSISTANT: MABEL LIU)

Reviewer : Martin Lu 21/11
(SUPERVISOR: MARTIN LU)

For and on behalf of
AUDIX TECHNOLOGY (SHENZHEN) CO.,LTD.

Approve & Authorized Signer : Leon Liu Nov. 24, 1998
Authorized Signature(s)
(MANAGER: LEON LIU)

1. GENERAL INFORMATION

1.1. Description of Device (EUT)

Description	:	Keyboard
Model Number	:	JME-7551A
Applicant	:	JING MOLD ENTERPRISE CO., LTD. No. 6-7, I-Huo Rd., Ta-Ya Chiang, Taichung Hsien, Taiwan, R.O.C.
Manufacturer	:	JING MOLD PLASTIC ELECTRONICS (SHENZHEN) CO., LTD. Xin Qiao 3rd Industrial Estate, Sha Jing, Pao An, Shen Zhen, China.
Data Cable	:	Shielded, Undetachable, 1.2m
Date of Test	:	Nov. 16/19, 1998

1.2. Tested System Details

1.2.1. PERSONAL COMPUTER

Model Number	:	PC763
Serial Number	:	TA341U1417
FCC ID	:	AO9-PC76X
Manufacturer	:	Digital
Switching Power Supply	:	Astec Model SA20I-3438
Floppy Driver	:	Teac Corp. Model FD-235HF
Hard Disk Driver	:	Quantum, Model 540AT
Disk Ctrl Card	:	Within Mother Board
Serial/Parallel Card	:	Within Mother Board
Power Cord	:	Nonshielded, Detachable, 1.8m

1.2.2. MONITOR

Model Number	:	KS-M1421
Serial Number	:	120954
FCC ID	:	KVCKS-M1421
Manufacturer	:	KSAI Electronics Co., Ltd.
Data Cable	:	Shielded, Undetachable, 1.2m
Power Cord	:	Nonshielded, Undetachable, 1.2m

1.2.3. PRINTER

Model Number	:	2225C+
Serial Number	:	2937S56660
FCC ID	:	DS16XU2225
Manufacturer	:	Hewlett Packard
Power Adapter	:	Hewlett Packard, Model 82241A
Power Cord	:	Nonshielded, Undetachable, 1.8m
Data Cable	:	Shielded, Detachable, 1.5m

1.2.4. MODEM # 1

Model Number	:	AT-1200CK
Serial Number	:	07-317798
FCC ID	:	E2O5OV1200CK
Manufacturer	:	Datatronics Technology, Inc.
Data Cable	:	Shielded, Detachable, 1.5m
Power Adapter	:	Datatronics, Model 48C Nonshielded, Undetachable, 1.5m

1.2.5. MODEM # 2

Model Number	:	1200AT
Serial Number	:	AT 122257
FCC ID	:	EF56A5 1200AT
Manufacturer	:	Team Technology, Inc.
Data Cable	:	Shielded, Detachable, 1.5m
Power Adapter	:	Kaming, Model AD-09
Power Cord	:	Unshielded, Nondetachable, 1.8m

1.2.6. MOUSE

Model Number	:	M-S34
Serial Number	:	LZA81403347
FCC ID	:	DZL211029
Manufacturer	:	LOGITECH
Data Cable	:	Nonshielded, Undetachable, 2.5m

1.3. Measurement Uncertainty

Conduction Uncertainty	:	Uc = $\pm$ 2.66 dB
Radiation Uncertainty	:	Ur = $\pm$ 4.26 dB

2. POWER LINE CONDUCTED MEASUREMENT

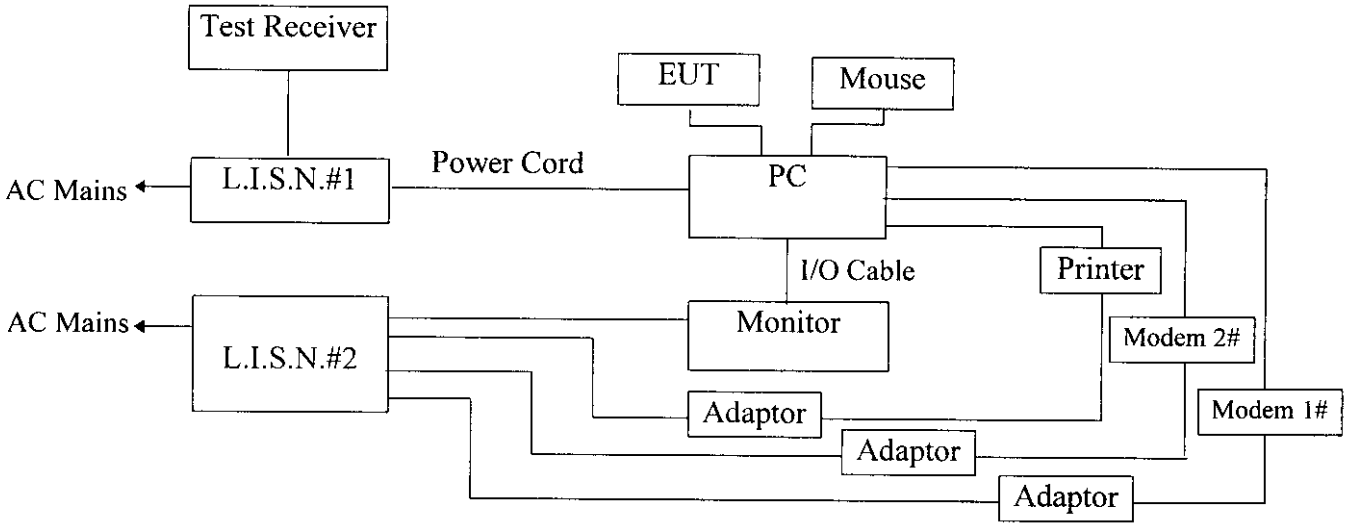
2.1. Test Equipment

The following test equipments are used during the power line conducted measurement:

Item	Type	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESHS20	836600/006	Jun. 07, 98	1 Year
2.	L.I.S.N. # 1	Kyoritsu	KNW-407	8-541-4	Jun. 07, 98	1 Year
3.	L.I.S.N. # 2	EMCO	3825/2	9006-1660	Jun. 07, 98	1 Year
4.	Coaxial Switch	Anritsu	MP59B	M29242	N/A	N/A

2.2. Block Diagram of Test Setup

2.2.1. Block diagram of connection between the EUT and simulators



(EUT: Keyboard)

2.3. Conducted Power Line Emission Limit

Frequency MHz	Maximum RF Line Voltage	
	μV	dB(μV)
0.45 ~ 30.00	250	48

Remarks: RF LINE VOLTAGE (dB(μV)) = 20 log RF LINE VOLTAGE (μV)

2.4. EUT Configuration on Measurement

The following equipments are installed on RF LINE VOLTAGE measurement to meet the Commission requirement and operating regulations in a manner which tends to maximize its emission characteristics in a normal application.

1.4. Description of Test Facility

Site Description	:	
3m Anechoic Chamber	:	Certificated by FCC, U.S.A, Aug. 18, 1997
3m & 10m Open Site	:	Certificated by FCC, U.S.A, Feb. 13, 1998
EMC Lab.	:	Certificated by TUV Rheinland Taiwan Dec. 05, 1995
		Certificated by COMMERCE, New Zealand May 19, 1997
		Certificated by NEMKO, Norway Feb. 28, 1998
Name of Firm	:	Audix Technology (Shenzhen) Co., Ltd.
Site Location	:	No. 6 Ke Feng Rd., 52 Block, Shenzhen Science & Industrial Park, Nantou, Shenzhen, Guangdong, China

2.4.1. Keyboard (EUT)

Model Number	:	JME-7551A
Serial Number	:	N/A
Manufacturer	:	JING MOLD PLASTIC ELECTRONICS (SHENZHEN) CO., LTD.
Data Cable	:	Shielded, Undetachable, 1.2m

2.4.2. Support Equipments

As in Section 1.2. Test System Details

2.5. Operating Condition of EUT

2.5.1. Setup the EUT and simulator as shown on Section 2.2.

2.5.2. Turn on the power of all equipments.

2.5.3. Personal Computer reads data from hard disk.

2.5.4. Personal Computer sends "H" character to Keyboard (EUT) and the screen will display and full with "H" pattern.

2.5.5. Personal Computer reads "H" character to printer, the printer will print "H" pattern on paper.

2.5.6. Personal Computer reads data from floppy disk and then writes data into floppy disk.

2.5.7. Personal Computer reads data from modem.

2.6. Test Procedure

The EUT is put on table which is 0.8m above the ground and away from other metallic surface at least 0.4m. The EUT is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm coupling impedance for the testing equipments. Please reference the block diagram of the test setup and photographs. Both sides of AC line(VA & VB) are checked for maximum conducted interference. In order to find the maximum emission levels, the relative positions of equipments and all of the interface cables must be changed according to FCC ANSI C63.4-1992 on conducted measurement.

The bandwidth of the test receiver (R&S ESHS20) is set at 10KHz.

The frequency range from 450KHz to 30MHz is checked.

The disturbance voltage from the EUT are investigated and the data is reported in Section 2.7.. Please reference to Appendix I.

2.7. Line Conducted RF Voltage Measurement Results

PASS.

The frequency range from 450KHz to 30 MHz is investigated.
All emissions not reported below are too low against the prescribed limits.

Date of Test :	Nov. 18, 1998	Temperature :	25 ℃
EUT :	Keyboard	Humidity :	63 %
Model No. :	JME-7551A	Working Condition :	**Running**
		Test Engineer :	Bright Xie

Frequency MHz	Reading		Limit dB(μV)
	Phase VA dB(μV)	Phase VB dB(μV)	
0.515	36.3	36.3	48
0.594	*	38.5	48
0.595	38.4	*	48
0.670	38.3	38.4	48
0.831	**39.9**	**40.1**	**48**
0.990	39.2	39.4	48
3.858	34.4	34.3	48

Remark : 1. "*" means the emission level is undetectable.
2. The worst emission is detected at 0.831MHz with corrected signal level of 40.1 dB(μV) (limit is 48 dB(μV)) when the VB side of the EUT is connected to L.I.S.N.

Reviewer : Martin Lu 21/11

3. RADIATED EMISSION MEASUREMENT

3.1. Test Equipment

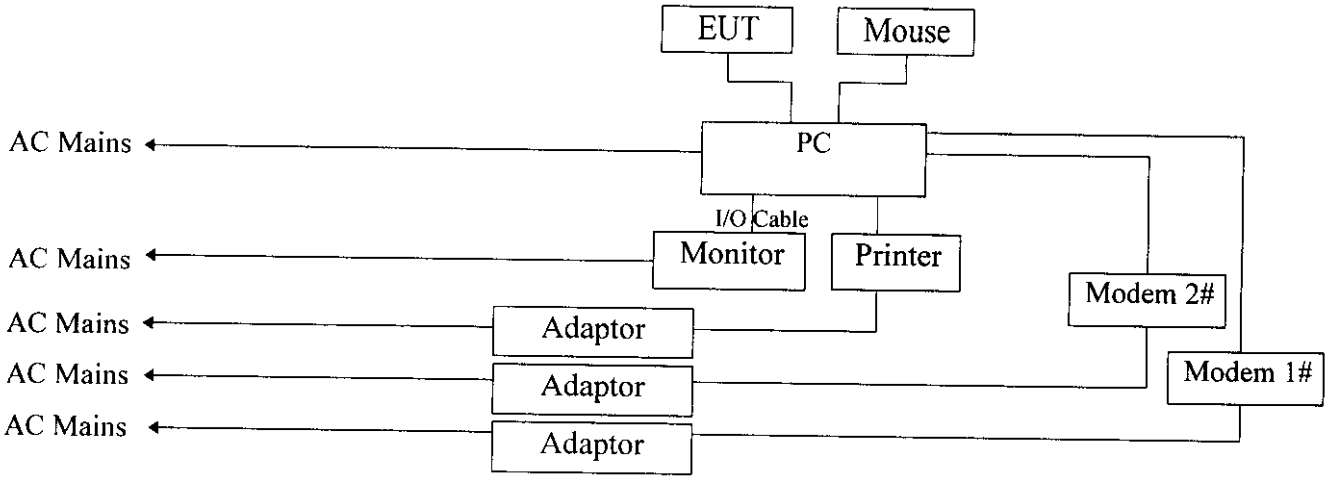
The following test equipments are used during the radiated emission measurement:

3.1.1. In Chamber # 3

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	EMI Test Receiver	HP	85422E	3625A00181	Jun. 07, 98	1 Year
2.	Amplifier	HP	8447D	2944A07794	Aug. 23, 98	1/2 Year
3.	Bilog Antenna	Chase	CBL6112A	2176	Sep. 27, 98	1 Year
4.	Computer	N/A	N/A	N/A	N/A	N/A
5.	Printer	NEC	P3800	568101448	N/A	N/A

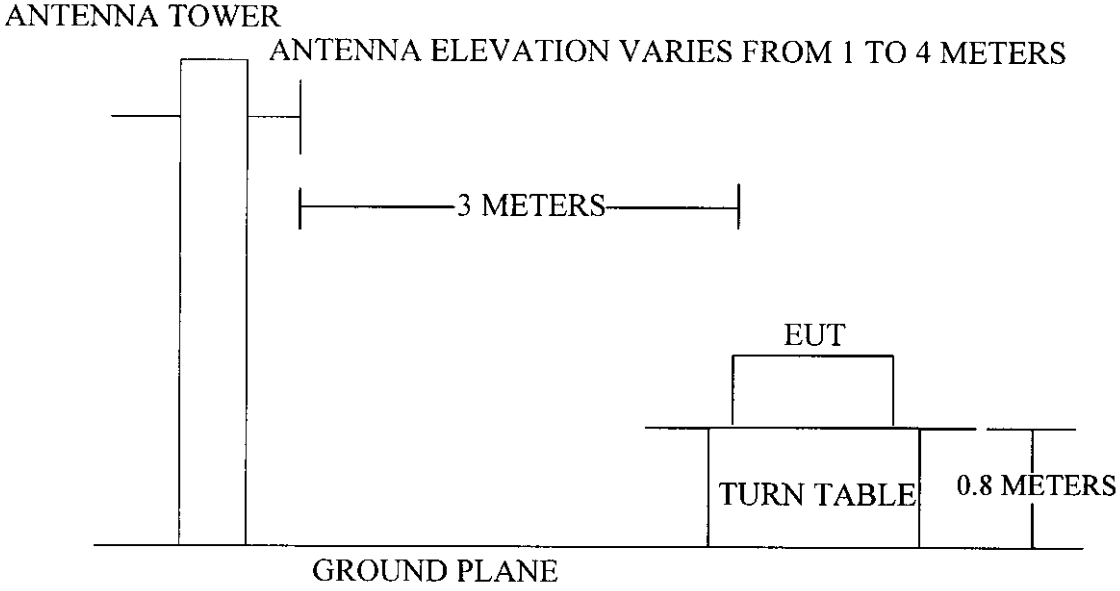
3.2. Block Diagram of Test Setup

3.2.1. Block diagram of connection between the EUT and simulators



(EUT: Keyboard)

3.2.2. Chamber # 3 Test Setup Diagram



3.3. Radiation Limit

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMITS dB(μV)/m
30 ~ 88	3	40.0
88 ~ 216	3	43.5
216 ~ 960	3	46.0
960 ~ 1000	3	54.0

Remark : (1) Emission level (dB(μV)/m) = 20 log Emission level (μV/m)
(2) The smaller limit shall apply at the cross point between two frequency bands.
(3) Distance refers to the distance in meters between the measuring instrument, antenna and the closed point of any part of the device or system.

3.4. EUT Configuration on Measurement

The configuration of EUT and its simulators are same as those used in conducted measurement. Please refer to Section 2.4.

3.5. Operating Condition of EUT

Same as conducted measurement which is listed in Section 2.5.

3.6. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT is set 3 meters away from the receiving antenna which is mounted on a antenna tower. The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated biconical and log periodical antenna) and dipole antenna are used as receiving antenna. Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.4-1992 on radiated emission measurement.

The bandwidth of the test receiver (R&S ESVS 20) is set at 120KHz.

The frequency range from 30MHz to 1000MHz is checked.

The one test mode (Running) are measured in the Chamber #3. All the test results are listed in Section 4.7. and all the scanning waveform are attached in Appendix II.

3.7. Radiated Emission Noise Measurement Results.

PASS.

The frequency range from 30MHz to 1000MHz is investigated. All the emission levels not reported below are too low against the Limit.

Please see the attached pages.

Date of Test	: Nov. 16, 1998	Temperature	: 25 ℃		
EUT	: Keyboard	Humidity	: 55%		
Model No.	: JME-7551A	Test Site	: #3 Chamber		
Display Pattern	: **Running**	Test Engineer	: Bright Xie		

Frequency MHz	Antenna Factor dB	Cable Loss dB	Meter Reading Horizontal dB	Emission Level Horizontal dBμV/m	Limits dBμV/m	Limits Over dBμV/m
71.200	6.30	1.68	20.80	28.77	40.00	-11.23
160.600	10.90	2.59	11.90	25.39	43.50	-18.11
216.050	9.67	3.05	12.80	25.52	46.00	-20.48
233.320	10.99	3.14	17.60	31.73	46.00	-14.27
249.980	12.38	3.28	20.90	36.56	46.00	-9.44
266.630	13.24	3.47	14.40	31.11	46.00	-14.89
312.130	13.84	3.72	14.50	32.07	46.00	-13.93
424.990	16.99	4.47	14.30	35.76	46.00	-10.24
433.450	16.84	4.50	12.70	34.04	46.00	-11.96

Calculation: Emission Level = Antenna Factor + Cable Loss + Meter Reading

Date of Test	: Nov. 16, 1998	Temperature	: 25 ℃		
EUT	: Keyboard	Humidity	: 55%		
Model No.	: JME-7551A	Test Site	: #3 Chamber		
Display Pattern	: **Running**	Test Engineer	: Bright Xie		

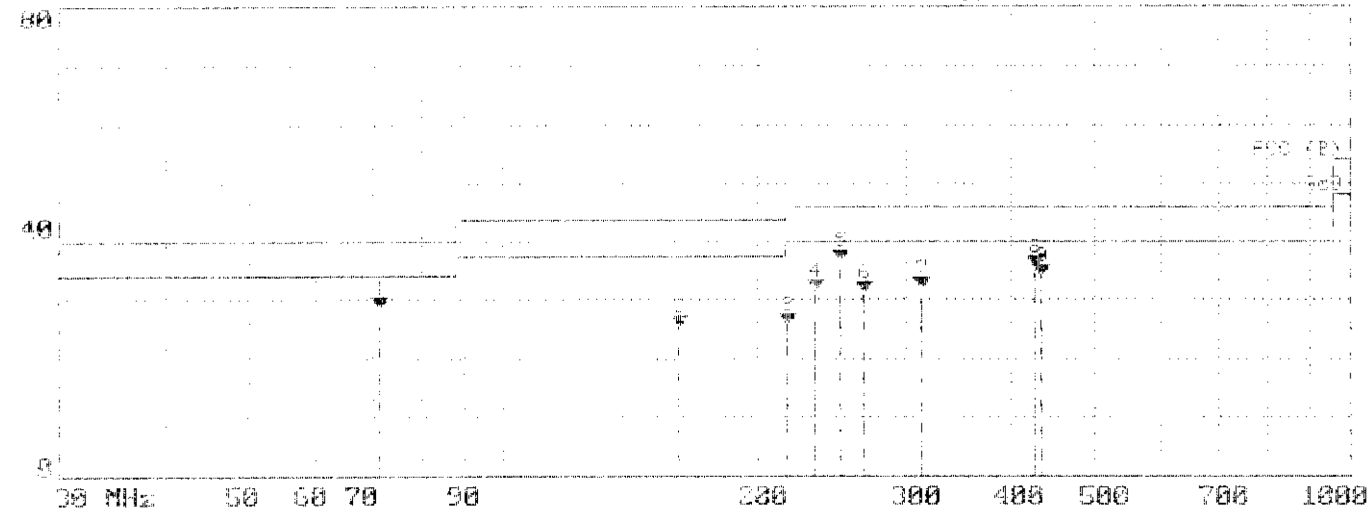
Frequency MHz	Antenna Factor dB	Cable Loss dB	Meter Reading Vertical dB	Emission Level Vertical dBμV/m	Limits dBμV/m	Limits Over dBμV/m
57.100	5.21	1.49	16.60	23.31	40.00	-16.69
92.100	10.61	1.92	13.20	25.72	43.50	-17.78
199.260	7.29	2.92	15.10	25.31	43.50	-18.19
209.697	8.14	2.99	14.60	25.73	43.50	-17.77
216.040	8.81	3.05	15.30	27.16	46.00	-18.84
249.600	11.86	3.28	12.70	27.84	46.00	-18.16
266.630	12.58	3.47	12.70	28.75	46.00	-17.25
313.020	14.08	3.73	10.40	28.21	46.00	-17.79
433.360	16.89	4.50	10.70	32.09	46.00	-13.91
541.340	16.95	5.11	8.60	30.67	46.00	-15.33
626.010	18.12	5.52	10.80	34.44	46.00	-11.56

Calculation: Emission Level = Antenna Factor + Cable Loss + Meter Reading

Reviewer : Martin Lu 21/11

Data#: 46   File#: JINGHOLD.EMI   Date: 11-16-1998 Time: 09:04:02

dBuV/m ACS Standard Chamber   AUDIX Technology (Shenzhen) Co., Ltd.



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Margin : [illegible]
EUT : [illegible]
Power : [illegible]
Memo : Running
:
:

Page: 1

	Freq	Level	Over Limit	Limit Line	Read Level	Probe Factor	Cable Loss	Preamp Factor	Remark
	MHz	dB	dB	dB	dB	dB	dB	dB	
1	71.200	28.77	-11.23	40.00	20.80	6.30	1.66	0.00	QP
2	[illegible]	25.[illegible]	[illegible].11	[illegible].50	11.[illegible]	10.00	[illegible].59	0.00	QP
3	216.050	25.52	-10.46	46.00	12.80	9.67	3.05	0.00	QP
4	[illegible]	31.7[illegible]	-14.27	46.00	17.60	10.99	3.14	0.00	QP
5	249.080	36.56	-9.44	46.00	20.90	11.38	3.28	0.00	QP
6	[illegible].6[illegible]0	[illegible].11	-14.[illegible]	46.00	14.40	13.24	3.47	0.00	QP
7	312.1[illegible]0	32.07	-1[illegible].9[illegible]	46.00	14.50	13.[illegible]4	[illegible].72	0.00	QP
8	4[illegible].990	[illegible].76	-10.24	46.00	14.30	16.99	4.47	0.00	QP
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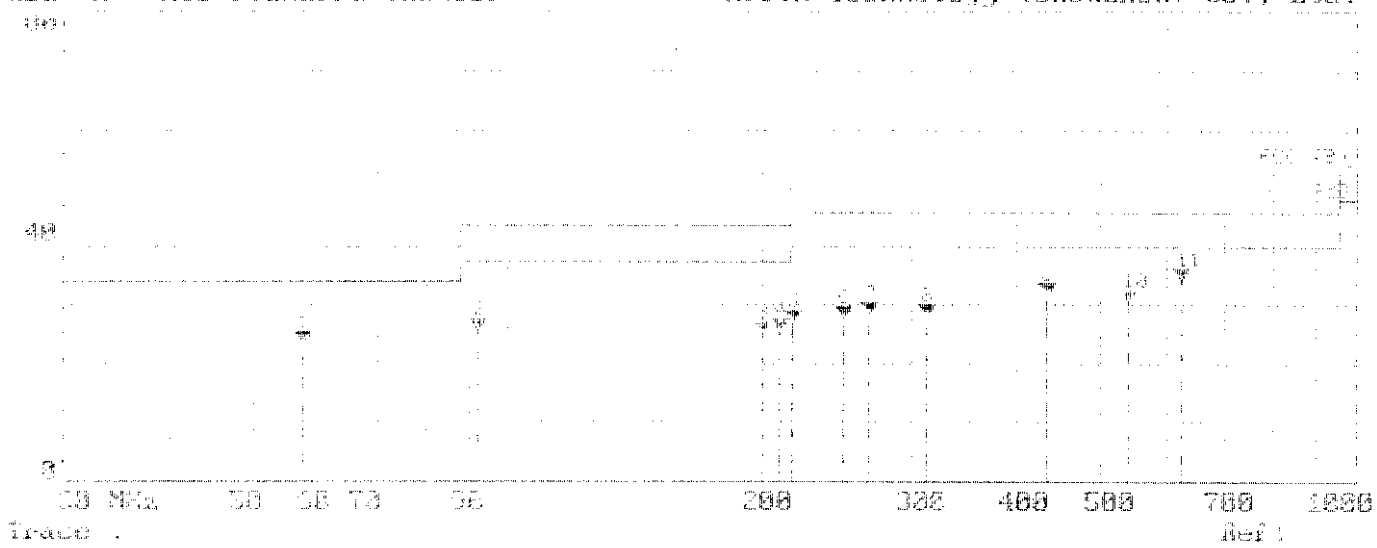
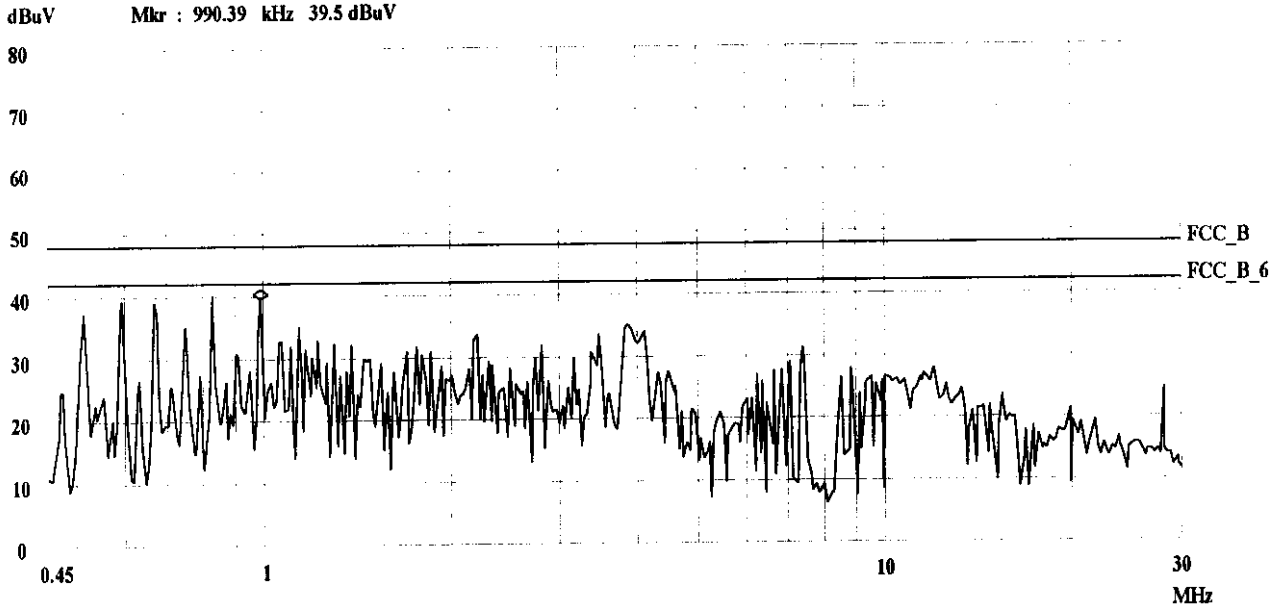

4M
0
30 MHz
50
58 70
95
200
300
400
500
700
1000

Conduction Test
FCC Part15 B

18. Nov 98 09:34

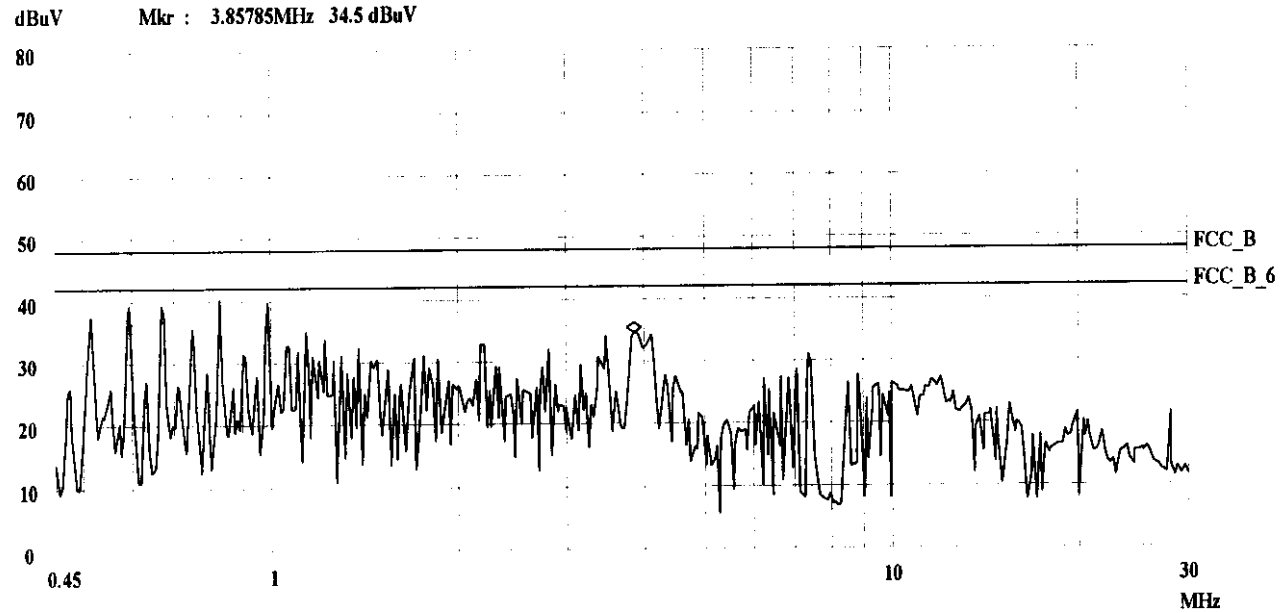
EUT: Keyboard M/N:JME-7551A
Manuf: JingMold
Op Cond: Running
Operator: PHILO
Test Spec: Va 120V/60Hz
Comment: Temp:25'C
Humi:63%



Conduction Test
FCC Part15 B

18. Nov 98 09:31

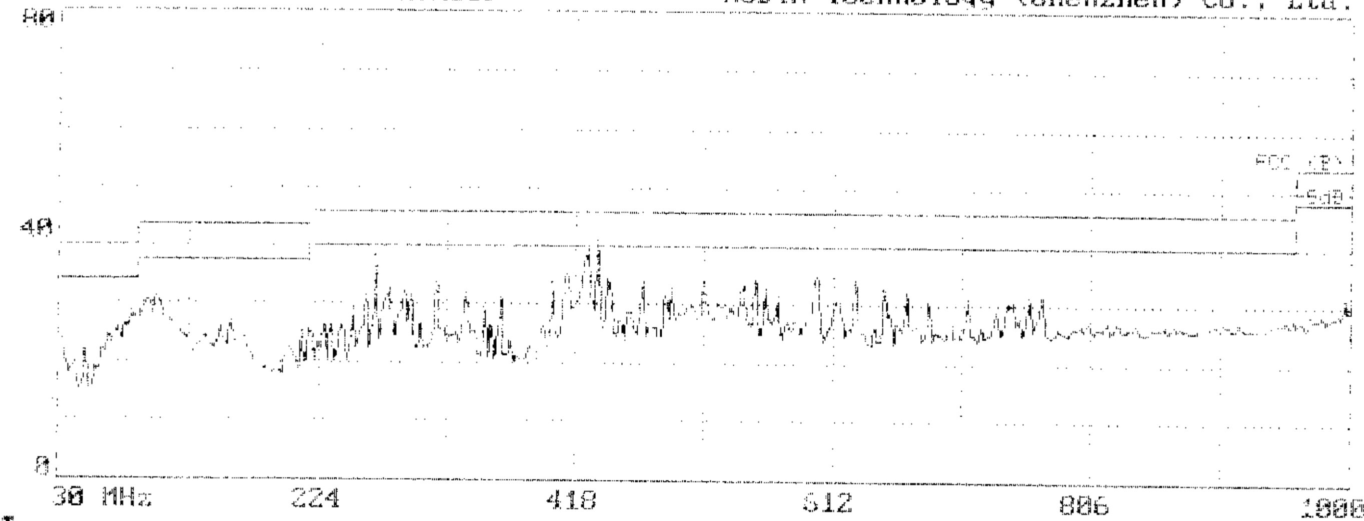
EUT: Keyboard M/N:JME-7551A
Manuf: JingMold
Op Cond: Running
Operator: PHILO
Test Spec: Vb 120V/60Hz
Comment: Temp:25'C
Humi:63%



APPENDIX II

Data#: 47 File#: JINGMOLD.EMI Date: 11-16-1998 Time: 09:02:08

dBuV/m ACS Standard Chamber AUDIX Technology (Shenzhen) Co., Ltd.



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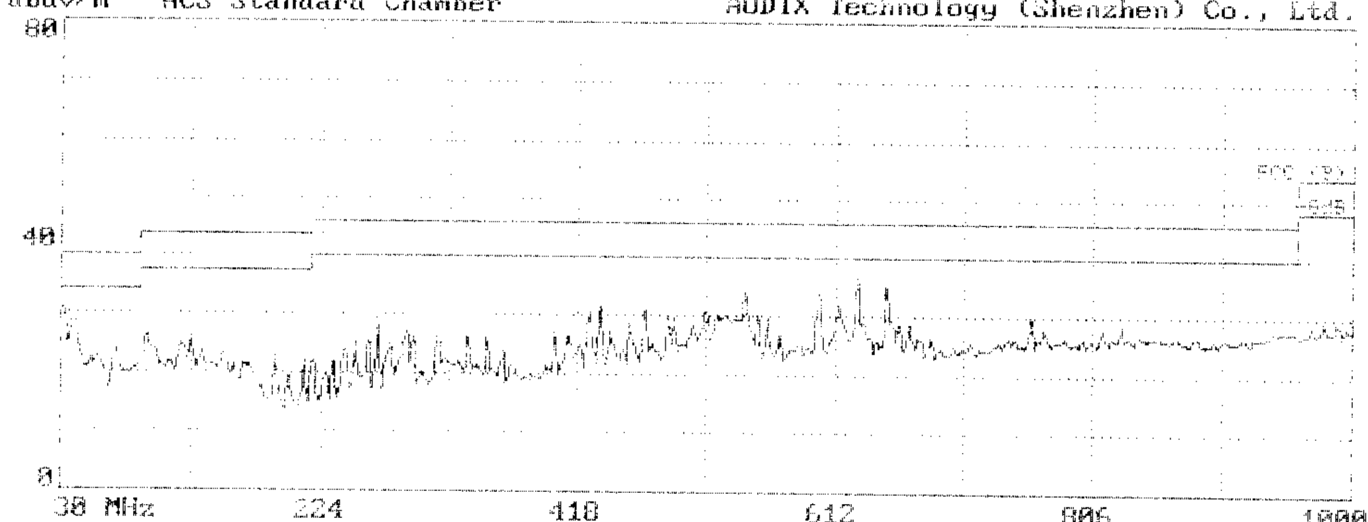

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Power : [illegible]V/60Hz

Memo : [illegible]

:

: